

REMARKS

In the Office Action, claims 1 - 51 were noted as pending in the application, and all claims were rejected. By this amendment, claims 30 - 32 and 49 - 51 have been canceled, claims 9 and 24 have been amended, and new claims 52 - 55 have been added. Thus, claims 1 - 29, 33 - 48, and 52 - 55 are pending in the application. The rejections of the Office Action are traversed below.

Objection to Claim 21

In item 6, on page 3 of the Office Action, claim 21 is objected to as reciting “means of . . . “ instead of “means for“ Applicants have reviewed claim 21 in view of the objection raised in the Office Action and respectfully assert that the language used in claim 21 is the language intended by the Applicants and further respectfully assert that the language is grammatically correct. For example, the display feature, in a simplified form, can be read as “means of display [] for displaying at least a portion . . .” If this language were changed in the manner suggested by the Office Action, this feature would then read, “means for display [] for displaying at least a portion . . .“ Applicants respectfully request that the objection to claim 21 be withdrawn.

Rejection of Claims 24 and 25 under 35 USC §112

In item 8, on page 4 of the Office Action, claims 24 and 25 were rejected under 35 USC §112, second paragraph, as being indefinite. The dependency of claim 24 has been amended herein to depend from claim 20, which is an independent claim directed to a device. Claim 25 depends from claim 24 and also recites a device. Applicants believe this change in dependency properly addresses the rejection of claims 24 and 25 under 35 USC § 112 and respectfully request withdrawal of this rejection.

Rejection of Claims 1, 2 - 5, 9, 10, 19, 20, 21, 22, 29 - 32, and 42 under 35 USC §103

In item 10, on pages 5 - 14 of the Office Action, claims 1, 2 - 5, 9, 10, 19, 20, 21, 22, 29 - 32, and 42 were rejected under 35 USC § 103 as being unpatentable over U.S. Patent 5,808,905 to Normann et al. in view of U.S. Patent No. 4,380,242 to Bresie et al. and further in view of U.S. Patent 5,364,077 to Jacobs et al. and further in view of U.S. Patent Application No. 2001/0003247 to Lundberg. The Applicants note that while claims 29 - 32

and 42 were not formally rejected under the rejection statement asserted at item 10 on page 5 of the Office Action, these claims are subsequently discussed under these references at item 10.2 on pages 10 - 14 and at item 10.3 on page 14, respectively. Accordingly, Applicants presume claims 29 - 32 and 42 were intended by the Examiner to be rejected under the above combination of four references. The rejection of the above claims is respectfully traversed.

Rejection of Claims 6 - 8, 11 - 13, 23, 33, and 35 - 37 under 35 USC §103

In item 11, on pages 15 - 19 of the Office Action, claims 6 - 8, 11 - 13; 23, 33, and 35 - 37 were rejected under 35 USC § 103 as being unpatentable over Norman et al. in view of Bresie et al. and further in view of Jacobs et al. and further in view of Lundberg and further in view of U.S. Patent No. 6,219,046 to Thomas et al. and further in view of U.S. Patent No. 5,828,377 to Muro et al. This rejection is respectfully traversed.

Rejection of Claims 14, 24, 38, 43, and 44 under 35 USC §103

In item 12, on pages 19 - 21 of the Office Action, claims 14, 24, 38, 43, and 44 were rejected under 35 USC § 103 as being unpatentable over Norman et al. in view of Bresie et al. and further in view of Jacobs et al. and further in view of Lundberg and further in view of U.S. Patent No. 6,612,186 to Patten et al. This rejection is respectfully traversed.

Rejection of Claims 15 and 25 under 35 USC §103

In item 13 on pages 21 - 22 of the Office Action, claims 15 and 25 were rejected under 35 USC § 103 as being unpatentable over Norman et al. in view of Bresie et al. and further in view of Jacobs et al. and further in view of Lundberg and further in view of Patten et al. and further in view of U.S. Patent No. 5,920,069 to Fisher et al. This rejection is respectfully traversed.

Rejection of Claims 16 - 18, 26 - 28, 39 - 41, and 45 - 47 under 35 USC §103

In item 14, on pages 22 - 24 of the Office Action, claims 16 - 18, 26 - 28, 39 - 41, and 45 - 47 were rejected under 35 USC § 103 as being unpatentable over Norman et al. in view of Bresie et al. and further in view of Jacobs et al. and further in view of Lundberg and further in view of Fisher et al. This rejection is respectfully traversed.

The Claimed Invention

Exemplary embodiments of the Applicants' invention are directed toward computer-based processes and devices for producing a diagram of an installation which uses various apparatuses, where the apparatuses are supplied with a gas. The diagram can be a three-dimensional graphic representation of the installation, displaying the relative disposition of the various gas supply pipes and ductings. Embodiments can also produce a set of data in databases, including data on the nature, purity, flow rate, supply pressure, and consumption of the gas for the apparatuses.

The Normann et al. Patent

Normann et al. discloses a method and apparatus for designing and editing a distribution system for a building (Norman et al. at abstract). For example, the design and placement of a sprinkler system for a building can be created and printed (Col. 4, lines 15 - 20; Col. 7, lines 33 - 36). Information about the distribution system elements and equipment is stored into the memory of a computer, as are various standard requirements that the user can select for conformance by the final design (Col. 2, lines 61 - 63).

The Bresie et al. Patent

Bresie et al. discloses a method and system for distributing a continuous supply of natural gas at varying demand rates without the need for a pipeline with which to transport the gas (Bresie et al. at abstract; Col. 1, lines 12 - 13; Col. 2, lines 14 - 17). The user terminal which is to be supplied with gas is analyzed to determine the amount of gas required over a given period of time (Col. 2, lines 42 - 45). This consumption information is integrated with transport information, including distance from the gas supply and kinds of transport equipment needed; and a distribution plan is drawn (Col. 2, lines 45 - 51). The resultant plan includes the type and number of transport vessels, such as movable pressure vessels, and schedules for delivery of the vessels (Col. 2, lines 51 - 54). The system requires the use of at least two types of pressure vessels; one which is movable between the supply terminal and the user terminal being serviced and one which is retained at the user terminal for being loaded with the gas supply transported from the supply terminal (Col. 2, line 65 - Col. 3, line 3).

The Jacobs et al. Patent

Jacobs et al. discloses an apparatus and method for the delivery of an inert gas to the heat chamber of a furnace to control the atmosphere while soldering electronic components (Jacobs et al. at abstract; Col. 1, lines 8 - 11). Diffuser tubes and an inert gas knife are situated proximate to the furnace heating chamber for dispensing an inert gas, such as nitrogen, into the heating chamber (Col. 1, lines 8 - 11; Col. 3, lines 3 - 10).

The Lundberg Patent Application

Lundberg discloses an apparatus and method for generating electrical power from the flow of a high pressure gas through a generator (Lundberg at abstract; ¶ 0001). A satellite generator is connected to a gas distribution network between the high pressure reservoir of the gas and the low pressure delivery pipelines (¶ 0007, ¶ 0008).

The Thomas et al. Patent

Thomas et al. discloses a method for displaying a graphical representation of a plurality of electrical devices of an electrical distribution/power management control system, including displaying a status or condition of the devices on a three-dimensional annunciator panel. (Thomas et al. at abstract; Col. 1, lines 6 - 10). A Panel Wizard is provided for automatically configuring the annunciator panel graphics by a user without any programming skills or detailed electrical device knowledge (Col. 1, lines 56 - 65).

The Muro et al. Patent

Muro et al. discloses a method for managing three-dimensional graphic data expressed by the coordinates of the component points of figures (Muro et al. at abstract). Two-dimensional graphic data can be extended to three-dimensional figures (Col. 5, lines 15 - 21).

The Patten et al. Patent

Patten et al. discloses a device and method for providing real time telemetry of a natural gas flow stream having multiple constituents (Patten et al. at abstract). The fractional composition of a flowing fluid can be determined by a metering device (Col. 3, lines 18 - 21).

A chromatograph or a Coriolis meter is used to analyze the content of a flow stream and used to determine constituent percentages of the flow stream (Col. 2, lines 34 - 39 and 61 - 65).

The Fisher et al. Patent

Fisher et al. discloses an apparatus and method for the identification of the components contained in a gas sample and their concentrations (Fisher et al. at abstract; Col. 1, lines 9 - 11). A beam of light of a predetermined frequency is transmitted through a gas sample and through a variable filter (Col. 2, lines 26 - 38). Light detectors are positioned to receive narrow passbands of light from the filter and to send detection signals to a processor, which determines the presence and concentrations of one or more gases in the gas sample (Col. 2, lines 36 - 45).

The Claimed Invention is Patentably Distinguishable Over the Cited Documents

The Applicants' claimed invention is directed toward processes and devices for producing a diagram of an installation which uses various apparatuses, and where the apparatuses are supplied with a gas. Several databases are consulted for data on the apparatuses and gas, and gas consumption is calculated for the various apparatuses and for the total of all of the apparatuses. A packaging for each gas can be proposed based on calculated gas consumption and technical constraints. A diagram or graphical representation of the installation can be produced representing the connections of gas sources to the apparatuses.

Claims 1 - 5, 9, 10, 19, 20, 21, 22, 29 - 32, and 42, including independent claims 1, 2, 20, and 21, have been rejected under a combination of four references, with a patent to Normann et al. constituting the primary reference. Normann et al. discloses a method and apparatus for designing and editing a building's infrastructure distribution system, such as plumbing, electrical, sprinkler, and HVAC systems. However, beyond creating a diagram of a building distribution system, there is little similarity between the present claimed invention and the distribution system disclosed in Normann et al. For example, the Office Action admits that Normann et al. fails to disclose the claimed feature of one or more databases comprising, for each apparatus, data on the flow rate and supply pressure of the gas supplying the apparatus. In fact, Normann et al. is completely silent regarding any database of data on the apparatuses of an installation. The Office Action cites to Normann et al. at Col. 2, lines

61 - 67 as allegedly disclosing such a database, but the cited portion of Normann et al. merely discloses that building standards and building components such as walls and obstructions reside in the memory of a computer. Applicants respectfully point out that walls and building components are not apparatuses supplied with gas as disclosed and claimed in the present application.

The Office Action introduces Bresie et al. as allegedly disclosing databases comprising, for each apparatus supplied with a gas, data on the flow rate and supply pressure of the gas. The Applicants respectfully assert that the Office Action's reliance on Bresie et al. is misplaced. While Bresie et al. discusses the pressure of a gas being transported in a vessel (Bresie et al. at 12, lines 53 - 56) and controlling the pressure of a gas being supplied to a user facility (Col. 6, line 55 - Col. 7, line 16), this reference is completely silent regarding any databases whatsoever. Nor does Bresie et al. disclose consulting any data file containing data on the flow rate and the supply pressure of a gas supplying an installation's apparatuses, as recited in independent claims 1, 20, and 21. Bresie et al. is equally silent regarding any data on the flow rate and supply pressure of the gas supplying each apparatus of the installation, as recited in independent claim 2. The Office Action cites to Bresie et al. at Col. 2, lines 23 - 26; Col. 3, lines 12 - 19; Col. 6, line 55 - Col. 7, line 16; and Col. 12, lines 42 - 54 as allegedly disclosing the databases and data comprising, for each apparatus, the flow rate and the supply pressure of the gas supplying each apparatus. However, none of these portions of Bresie et al. disclose a database, much less a database comprising data on the flow rate and the supply pressure of a gas supplying an apparatus.

While teachings of several documents may be combined to render a claimed invention obvious, there must be a motivation or suggestion in the documents relied upon to make the specific combination. Applicants respectfully assert that no suggestion or motivation exists in either Normann et al. or Bresie et al. (nor has any portion of these references been so cited by the Office Action) to combine the building distribution diagram system of Normann et al. with the portable vessel-based natural gas distribution system of Bresie et al. Instead, the Office Action presents the unsupported assertion that it would have been obvious to modify the system of Normann et al. with the databases of Bresie et al. (if indeed any such databases were disclosed in Bresie et al., which they are not) so the distribution technique could meet a varying demand. However, the system of Normann et al. is configured to provide a distribution system that meets a particular standard (Normann et al. at Col. 3, lines 1 - 15;

Col. 4, lines 21 - 25 and 34 - 38; Col. 7, lines 3 - 6). In this manner, the demand as specified by the standard is assured of being met in Normann et al., and there would have been no reason to add the vessel distribution system of Bresie et al. to the already functioning distribution design system of Normann et al.

Not only is there no motivation for combining Normann et al. and Bresie et al. in the manner suggested by the Office Action, Bresie et al. actually teaches away from the internal piped distribution system of Normann et al. Normann et al. discloses a building-wide distribution system, such as plumbing piping, electrical lines, ventilation ducts, and sprinkler piping (Col. 2, lines 57 - 61). In contrast, Bresie et al. is directed away from building any piped network (Bresie et al. at Col. 2, lines 14 - 17) and instead relies on portable vessels to be transported between a supply terminal and a user terminal according to a delivery schedule (Col. 2, lines 38 - 41 and 51 - 54).

The Office Action further admits that Normann et al. fails to disclose a database comprising, for each apparatus, data on the nature and the purity of the gas supplying each apparatus. The Office Action introduces Jacobs et al. as allegedly disclosing databases comprising, for each apparatus supplied with a gas, data on the nature and the purity of the gas. Applicants respectfully disagree and note that a thorough reading of the Jacobs et al. reference fails to disclose any databases whatsoever and further fails to disclose any data on either the purity or the nature of any apparatus supply gas. Jacobs et al. makes a single reference to the desired purity of an inert gas for use in a furnace heat chamber at Col. 3, lines 57 - 61 but fails to disclose any data or databases, associated with the purity or the nature of a gas, that are consulted by the system of Jacobs et al., as is recited in independent claims 1, 2, 20, and 21 herein. The Office Action makes the unsupported declaration on page 7 that “the purpose for which the gas is used determines the nature of the gas” and that “the purpose of the use of the gas determines the required purity.” Whether the determination of the nature and the purity of a gas is as simplistic as asserted in the Office Action is irrelevant because no such feature is recited in the independent claims. Instead, the invention herein recites in independent claims 1, 2, 20, and 21 one or more databases comprising, for each apparatus, data on the nature and the purity of the gas for that apparatus. Jacobs et al. fails to disclose any database at all, much less a database comprising data on the nature and the purity of the gas for each apparatus.

As discussed above, in order to combine references to allegedly render a claimed

invention obvious, there must be a motivation or suggestion in the documents relied upon to make the specific combination. Applicants respectfully assert that no suggestion or motivation exists in either Normann et al., Bresie et al., or Jacobs et al. (nor has any portion of these references been so cited) to combine the building distribution diagram system of Normann et al. with the portable vessel-based natural gas distribution system of Bresie et al. with the inert gas delivery system of Jacobs et al. to teach the features recited in independent claims 1, 2, 20, and 21. Instead, the Office Action presents the unsupported assertion that it would have been obvious to modify the system of Normann et al. with the alleged databases of Jacobs et al. (if indeed any such databases were disclosed in Jacobs et al., which they are not) “as the purpose for which the gas was used would determine the nature of the gas” and “the use of the gas would determine the required purity.” However, Normann et al. does not need to determine the nature or the purity of a gas. Instead, Normann et al. is directed toward designing a distribution system for a building to accommodate the plumbing, electrical, HVAC, and/or sprinkler system infrastructure of the building -- all without considering the nature or the purity of a gas supplied to any apparatuses of the building. If, as asserted by the Office Action, the use of a gas determines the nature and the purity of the gas, there would never need to be any data associated with the nature and the purity of the gas -- such data elements would be unnecessary in view of the nature and purity of the gas being determined by the intended purpose of the gas. Accordingly, there would be no motivation to combine such data (even if it were disclosed by Jacobs et al., which it is not), with the fully functioning distribution design system of Normann et al.

Further, the Office Action rejected independent claims 1, 2, 20, and 21 in view of the combination of the Normann et al., Bresie et al., Jacobs et al., and Lundberg references. Therefore, the Office Action must present a reason why one skilled in the art would have been motivated to combine all of these references together to teach the invention recited in claims 1, 2, 20, and 21. Merely asserting why it might have been obvious to combine Normann et al. and Jacobs et al. is insufficient because the claims were rejected on a broader combination of references.

The Office Action further admits that Normann et al. fails to disclose the selection, for each apparatus, of a value or of a limit value of duration or frequency of use. The Office Action relies on Bresie et al. at Col. 2, lines 23 - 26 as allegedly teaching this feature. Applicants respectfully disagree that Bresie et al. discloses such a feature. Bresie et al. at

Col. 2, lines 23 - 26 merely notes that natural gas demand can vary significantly from hour to hour and day to day, and the distribution techniques must be able to meet such a varying demand. Bresie et al. makes no reference to selecting any limit value of duration or frequency of use for each apparatus -- it merely notes that demand of a gas can vary, which states the problem and not the solution as recited in independent claims 1 and 20.

The Office Action also admits that Normann et al. fails to disclose the calculation, for each apparatus, of the consumption, or of the limit consumption, according to the utilization value and to the flow rate data. The Office Action again relies on Bresie et al. as allegedly disclosing such a feature at Col. 2, lines 42 - 51. Applicants respectfully disagree that Bresie et al. discloses such a feature. Bresie et al. at Col. 2, lines 42 - 51 discloses analyzing a user terminal to determine the amount of natural gas required over a given period of time, including fluctuations in demand, and drawing a gas distribution plan based on transport information and the quantity and the preferred flow rate of natural gas available at the supply terminal. Bresie et al. is completely silent regarding the detailed, per apparatus, calculation of gas consumption according to the utilization value of the apparatus and to the flow rate data of the gas, as recited in independent claims 1, 20, and 21. Instead, Bresie et al. uses the consumption total for the entire user terminal, factors in transport information such as the distances to be traveled and the traffic conditions, to draw a vessel distribution plan, with no consideration to individual apparatus consumption based on an apparatus utilization value.

The Office Action further admits that Normann et al. fails to disclose the calculation, for each gas and for each gas purity, of the total of the consumptions of all of the apparatuses. The Office Action relies once again on Bresie et al. as allegedly disclosing such a feature at Col. 2, lines 42 - 51. Applicants respectfully disagree that Bresie et al. discloses such a feature. Bresie et al. discloses the total consumption of natural gas by the user terminal but fails to teach a gas of varying purity, much less the calculation, for each gas purity, of the total consumption of all of the apparatuses of each such gas purity as recited in independent claims 1, 2, 20, and 21.

The Office Action further admits that Normann et al. fails to disclose the consultation of a database for proposing, for each gas and each gas purity, a packaging, according to the consumption and the technical constraints relating to the storage of the gas and/or to their delivery. The Office Action again cites to Bresie et al. as allegedly disclosing such a feature at Col. 2, lines 45 - 54. Applicants respectfully disagree that Bresie et al. discloses this

feature. First, Bresie et al. is silent regarding the consultation of a database for proposing a packaging. Instead, Bresie et al. merely analyzes the amount of gas required, the fluctuation in demand, the transport information, and the preferred flow rate at the supplier terminal to determine a distribution plan for the number and the scheduling of vessels to be transported from a supply terminal to a user terminal (Col. 2, lines 45 - 54; Col. 10, line 18 - Col. 11, line 5). Second, Bresie et al. fails to disclose proposing a packaging for each gas and each gas purity. Bresie et al. is limited to natural gas and does not consider gas purity in its vessel transport system, contrary to the features recited in independent claims 1 and 20. Accordingly, since neither Normann et al. nor Bresie et al. discloses the claimed feature, then the Normann et al./Bresie et al. combination cannot possibly teach the feature either.

The Office Action again admits that Normann et al. fails to disclose the calculation, for each gas and each gas purity, of the total of the consumptions of all of the apparatuses. This time, Jacobs et al. is relied upon as allegedly teaching such a feature at Col. 3, lines 57 - 60. Applicants respectfully disagree that Jacobs et al. teaches such a feature. The cited portion of Jacobs et al. merely notes the preference that the inert gas should be nitrogen at a purity level of at least 99.5%. There is absolutely no mention or even suggestion of the calculation of the total gas consumption, for each gas and each gas purity, of all the apparatuses, as recited in independent claims 1, 2, 20, and 21. Accordingly, since neither Normann et al. nor Jacobs et al. discloses the claimed feature, then the Normann et al./Jacobs et al. combination cannot possibly teach the feature either.

The Office Action again admits that Normann et al. fails to disclose the consultation of a database for proposing, for each gas and each gas purity, a packaging, according to the consumptions and the technical constraints relating to the storage of the gas and/or to their delivery. Lundberg is introduced as allegedly teaching the proposing of a packaging, according to the consumptions and the technical constraints, for each gas and gas purity. Applicants respectfully disagree that Lundberg teaches such a feature. "Packaging" is disclosed in the present specification as the method of storing and/or supplying the gas to the apparatuses. Packaging can include the bottles, container, generator, and/or the flow rate for the gas. See, for example, the specification at page 22, lines 35 - 36; page 28, lines 2 - 7. Lundberg fails to disclose any packaging of a gas. The Office Action has cited to page 2, paragraph 0014 of the Lundberg reference, but this paragraph discusses "packing," which is described as the pressure used to provide an incremental increase in pressure for later use

from the reservoir or pipeline for purposes of generating electricity. Applicants respectfully assert that the “packing” within the electrical generation system of Lundberg has absolutely nothing to do with the packaging recited in independent claims 1, 2, and 20.

As discussed above, in order to combine references to allegedly render a claimed invention obvious, there must be a motivation or suggestion in the documents relied upon to make the specific combination. Applicants respectfully assert that no suggestion or motivation exists in either Normann et al., Bresie et al., Jacobs et al., or Lundberg (nor has any portion of these references been so cited) to combine the building distribution diagram system of Normann et al. with the portable vessel-based natural gas distribution system of Bresie et al. with the inert gas delivery system of Jacobs et al. with the electrical power generating method of Lundberg to teach the features recited in independent claims 1, 2, 20, and 21. Instead, the Office Action presents the unsupported assertion that it would have been obvious to modify the system of Normann et al. with the alleged packaging of Lundberg (if indeed any such packaging was disclosed in Lundberg, which it is not) “as that would separate the gas packaging based on tolerance of gas composition and purity.” However, Normann et al. does not need to separate any alleged gas packaging based on gas composition or purity. Instead, Normann et al. is directed toward designing a distribution system for a building to accommodate the plumbing, electrical, HVAC, and/or sprinkler system infrastructure of the building -- all without considering the nature or the purity of a gas supplied to any apparatuses of the building. Accordingly, there would be no motivation to combine such gas packaging (even if it were disclosed by Lundberg, which it is not) with the fully functioning distribution design system of Normann et al. Furthermore, for documents to be combined to render a claimed invention obvious, the references must teach in subject matter analogous to that of the invention. Lundberg, as directed toward an electrical power generating system, clearly does not teach in the same subject matter as the present claimed processes and devices for producing a diagram of an installation which uses various apparatuses, where the apparatuses are supplied with a gas.

For the reasons discussed above, independent claims 1, 2, 20, and 21 are believed to be patentably distinguishable over Normann et al., Bresie et al., Jacobs et al., and Lundberg, either taken alone or in any combination. Accordingly, it is respectfully requested that the rejection of claims 1, 2, 20, and 21 be withdrawn.

Claims 6 - 8, 10, 14 - 19, and 35 - 37 depend from claim 1 and include all the features

of claim 1 plus additional features which are not taught or suggested by any of the cited documents. For example, claim 8 specifies that a first and second steps of consultation and searching comprise a display or visualization which shows in the first step: the storage or the packaging of the gas, and the equipment necessary for the functioning of this storage or this packaging; and in the second: the connections to be made between the outlet of the storage or the packaging of the gas and the apparatus supplied with that gas, which is neither taught nor suggested by Normann et al., Bresie et al., Jacobs et al., Lundberg, Thomas et al., Muro et al., Patten et al., or Fisher et al. The Office Action admits that Normann et al. fails to disclose this feature and cites to Thomas et al. at the abstract and to Muro et al. at Col. 1, lines 22 - 27 as allegedly teaching this feature. Applicants respectfully disagree that either Thomas et al. or Muro et al. teach this feature. Thomas et al. discloses a method for displaying a graphical representation of a plurality of electrical devices of an electrical distribution/power management control system. Contrary to the assertions of the Office Action, Thomas et al. is completely silent regarding a display or visualization that shows the storage or the packaging of a gas, nor does it disclose the equipment necessary for the functioning of this storage or this packaging. Muro et al. is directed toward a method for managing three-dimensional graphic data expressed by the coordinates of the component points of figures; and, as such, fails to remedy the deficiencies of Thomas et al. Therefore, for at least this reason and the reasons set forth above with respect to claim 1, it is submitted that claims 6 - 8, 10, 14 - 19, and 35 - 37 patentably distinguish over the cited documents.

Claims 3 - 5, 9, 11 - 13, 33, 34, and 38 - 41 depend from claim 2 and include all the features of claim 2 plus additional features which are not taught or suggested by any of the cited documents. For example, claim 38 specifies a process, comprising, when one of the gas is a mixture of a balance gas and at least a first mixed gas: the selection of the desired quantitative composition of gas mixed in the mixture; the consultation of a database (5) comprising, for each mixture, the preparation tolerances and the corresponding analysis uncertainties; and the indication, for the desired quantitative composition, of the preparation tolerance and of the analysis uncertainty, which is neither taught nor suggested by Normann et al., Bresie et al., Jacobs et al., Lundberg, Thomas et al., Muro et al., Patten et al., or Fisher et al. The Office Action admits that Normann et al. fails to disclose this feature and cites to Patten et al. at Col. 1, lines 13 - 18 and 24 - 30 and 43 - 58 as allegedly teaching this feature. Applicants respectfully disagree that Patten et al. teaches this feature. Patten et al. discloses a

device and method for providing real time telemetry of a natural gas flow stream having multiple constituents and for determining the constituent percentages of the gas flow. Patten et al. is completely silent regarding selecting a desired composition of a gas mixture. It can merely determine what the mixture of a gas is. Similarly, Patten et al. fails to disclose consultation of a database comprising, for each selected mixture, the preparation tolerances and the corresponding analysis uncertainties. Therefore, for at least this reason and the reasons set forth above with respect to claim 2, it is submitted that claims 3 - 5, 9, 11,- 13, 33, 34, and 38 - 41 patentably distinguish over the cited documents.

Claims 22 - 29 and 43 depend from claim 20 and include all the features of claim 20 plus additional features which are not taught or suggested by any of the cited documents. For example, claim 27 specifies that the device includes means for, or specially programmed for, displaying, on a same page (232) of a screen of a display means (29), and for a same apparatus, the corresponding data (236, 238, 240, 242) on the gas to be used with that apparatus, which is neither taught nor suggested by Normann et al., Bresie et al., Jacobs et al., Lundberg, Thomas et al., Muro et al., Patten et al., or Fisher et al. The Office Action admits that Normann et al. fails to disclose this feature and cites to Fisher et al. at Col. 10, lines 33 - 55 as allegedly teaching this feature. Applicants respectfully disagree that Fisher et al. teaches this feature. Fisher et al. discloses an apparatus and method for the identification of the components contained in a gas sample and their concentrations. The cited portion of Fisher et al. discloses displaying a determined component of a gas sample and its concentration in the sample. Fisher et al. is silent regarding displaying on a same page and for a same apparatus the data on the gas to be used with that apparatus. Therefore, for at least this reason and the reasons set forth above with respect to claim 20, it is submitted that claims 22 - 29 and 43 patentably distinguish over the cited documents.

Claims 42 and 44 - 48 depend from claim 21 and include all the features of claim 21 plus additional features which are not taught or suggested by any of the cited documents. For example, claim 47 specifies that the terminal device includes means for, or specially programmed for, displaying, on a same page (258) of a screen of a display means (29), and for a same gas, the total of the consumptions for that gas and all of the apparatuses supplied by that gas, which is neither taught nor suggested by Normann et al., Bresie et al., Jacobs et al., Lundberg, Thomas et al., Muro et al., Patten et al., or Fisher et al. The Office Action admits that Normann et al. fails to disclose this feature and cites to Fisher at Col. 10, lines 33

- 35 as allegedly teaching this feature. Applicants respectfully disagree that Fisher et al. teaches this feature. Fisher et al. discloses an apparatus and method for the identification of the components contained in a gas sample and their concentrations. The cited portion of Fisher et al. discloses displaying a determined component of a gas sample and its concentration in the sample. Fisher et al. is silent regarding the total consumption of the gas and further fails to disclose displaying all of the apparatuses supplied by the gas. Therefore, for at least this reason and the reasons set forth above with respect to claim 21, it is submitted that claims 42 and 44 - 48 patentably distinguish over the cited documents.

Rejection of Claims 34 and 48 - 51

The Applicant respectfully notes the Summary page of the present Office Action has rejected all claims pending in the present application, including claims 34 and 48 - 51. However, the Office Action has failed to indicate the basis for the rejection of claims 34 and 48 - 51, contrary to the requirements of 37 CFR § 1.104(c) and MPEP § 706. Accordingly, Applicants are unable to respond to the alleged rejection of claims 34 and 48 - 51. Applicants respectfully request the grounds of the rejection of these claims be specified or their rejection withdrawn.

New Claims

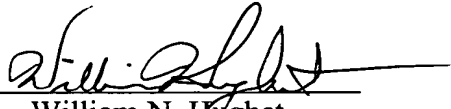
Claims 52 - 55 have been added to more precisely recite the features of the invention. The documents of record do not teach or suggest a computer program product, which, when executed by a computer, implements a process for producing a diagram of an installation using apparatuses or implements a process for producing a database comprising a set of data for the constitution of an installation using apparatuses as set forth in claims 52 and 54. Nor do the documents of record teach or suggest a computer-readable medium encoded with software for producing a diagram of an installation using apparatuses or for producing a database comprising a set of data for the constitution of an installation using apparatuses as set forth in claims 53 and 55. Support for the new claims can be found in the specification at least at page 2, lines 12 - 34; page 3, line 34 - page 4, line 11; page 9, lines 31 - 36; page 12, lines 23 - 27; page 33, lines 20 - 36;

Summary

It is submitted that none of the documents, either taken alone or in combination, teach the claimed invention. Thus, claims 1 - 29, 33 - 48, and 52 - 55 are deemed to be in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited. If any fees are required in connection with this Amendment, please charge the same to our Deposit Account No. 02-4800.

Respectfully submitted,

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